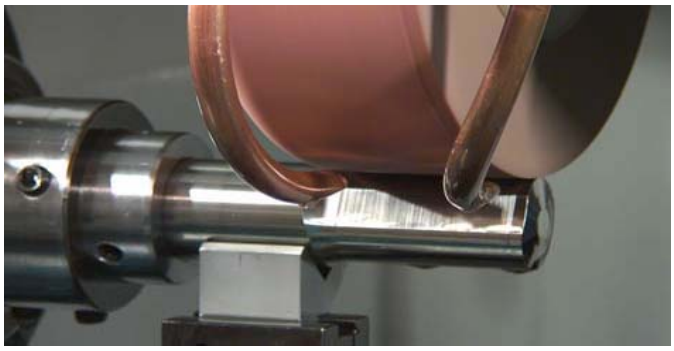
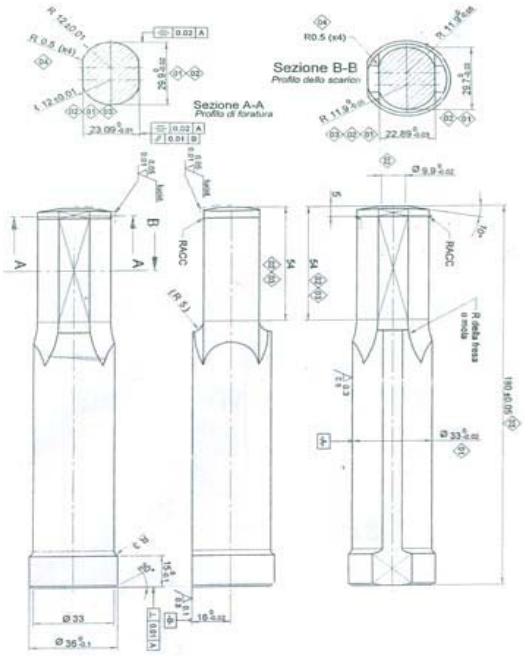
Application Data Sheet

Punch Ø29,7 L160mm

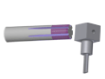
A27-010



The tools usually ground from a solid cylindrical part with conventional wheels. It allows to change the spline geoemetry fast and economically by simply changing the wheel-DXF and redress the new geometry on the same wheel, and for small splines the wheel can be kept sharp as being redressed when needed. Pregrinding could eventually be done with a CBN wheel, to increase grinding efficiency.



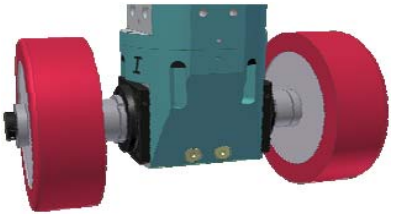
1. Cycletime for Production

Workpiece: Ø29.7 Lenght 160mm Material HSS					
Operations	 Probe	 Dress	 Poly-rough	 Dress	 Poly Finish
Feed [mm/Min]	2000	150	1000	150	35
Power [kW]		2	1	1	1
Cutting speed [m/s]		32	24	32	24
Used wheels			2		1
Grinding time [s]	20	120	720	120	180
Total cycle time	19 Min 20				

The cycle times are indicative. Material to be ground, grinding wheels, coolants can influence the cycle times considerably.

2. Used Grinding Wheels

1	Ø200 1a1 B151
2	Ø200 DXF Conventional



1 2

3. Machine and Software Requirements

Machines: 5 axes CNC grinders : GEMINI*dmr* linear
Control: Fanuc 31i
Accessories: Dressing unit
Coolant: Synthetic Oil, pressure 6-7 bar
Software: Quinto 5

Responsible engineer: DI, 01.04.20099

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TECHNOLOGY FOR TOOLING